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 TITLE: Preparation of cyanoalkylated glycosides as surfactants and their intermediates
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 PATENT ASSIGNEE(S): Kao Corp., Japan
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 PATENT INFORMATION:

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JP 03287596	A2	19911218	JP 1990-91204	19900404
PRIORITY APPLN. INFO.:			JP 1990-91204	19900404

ED Entered STN: 31 May 1992

AB The title glycosides A(Gn)[(R10)xB]y (Gn = sugar residue derived by removing H's from all the glycosidic and nonglycosidic OH's of a C5-6 reducing sugar or its condensate with average degree of condensation n = 1-10; A = R2(OR3)z forming a O-glycosidic bond with Gn; R2 = C6-22 linear or branched alkyl, alkenyl, or alkylphenyl; R3 = C2-4 alkylene; z = 0-20; R1 = C2-4 alkylene forming an ether bond with a nonglycosidic OH-derived O at one end of the terminus and an ether bond with B at the other end of the terminus; x = 0-10 representing (the total mol number of alkylene oxide added to the nonglycosidic OH's in the C5-6 reducing sugar or its condensate)/y; y = number of nonglycosidic OH's in the C5-6 reducing sugar or its condensate; B = H, CH2CHXCN; at least one of y B groups = CH2CHXCN; X = H, Me) are prepared by reaction of A(Gn)[(R10)xB]y with CH3CXCN. Thus, 73.1 g acrylonitrile and 5 mL aqueous solution of 0.9 g KOH were added to a DMF solution of

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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PRIORITY APPLN. INFO.:			JP 1990-97341	19900412

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AB A(Gm)[(R10)xB]y [G = C5- or C6-reducing sugar residue (sugar residue excluding both the Hs of the non-glycosidic OHs and those of the glycosidic OHs); m = condensation degree (1-10); A = R2(OR3)z linked with Gm in a glycosidic linkage; R2 = C1-22 alkyl, alkenyl, alkynyl, alkylphenyl; R3 = C2-4 alkylene; z = 0-20; R1 = C2-4 alkylene, one end of which connects with a non-glycosidic O of the Gm residue and the other end forms an ether linkage with B; x = 0-10; y = number of non-glycosidic O of Gm; B = H, 2,3-dihydroxypropyl] were prepared as surfactants. Lauryl alc. was heated with glucose and p-toluenesulfonic acid monohydrate at 100° to give lauryl glucoside with a condensation degree of 1.25. This product was heated with 2,3-epoxy-1-propanol in dioxane containing Et3N at 40° for 3 h to give a 2,3-dihydroxypropylated lauryl glucoside with a substitution degree of 1.0.

IC ICM C07H015-08

ICA B01F017-56

CC 33-3 (Carbohydrates)

Section cross-reference(s): 46

ST hydroxypropylated alkyl glycoside; surfactant hydroxypropylated alkyl glycoside

IT Surfactants

(dihydroxypropylated alkyl glycosides)

IT Glycosides

RL: SPN (Synthetic preparation); PREP (Preparation)

(alkyl, dihydroxypropyl ethers, preparation of, as surfactants)

IT 141472-96-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as surfactant)

IT 141472-96-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as surfactant)

RN 141472-96-0 HCAPLUS

CN β-D-Glucopyranoside, dodecyl mono-O-(2-hydroxypropyl)- (9CI) (CA INDEX NAME)

CM 1

CRN 59122-55-3

CMP C18 H36 O6

Absolute stereochemistry.

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